CHAPTER 1—Introduction

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A birdwatcher emerges from the Lake Andes National Wildlife Refuge Complex headquarters.

The U.S. Fish and Wildlife Service (Service) has developed this draft comprehensive conservation plan (CCP) and environmental assessment (EA) to provide a foundation for the management and use of the Lake Andes National Wildlife Refuge Complex (Complex) located in southeastern South Dakota (figure 2). When finalized, the CCP portion of this document will serve as a working guide for management programs and actions at the Complex over the next 15 years.

This draft CCP and EA was developed in compliance with the National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) and Part 602 of "The Fish and Wildlife Service Manual." The actions described within this draft CCP and EA meet the requirements of the National Environmental Policy Act of 1969 (NEPA). Compliance with NEPA is being achieved through public involvement and the analyses presented in this document.

The final CCP will specify the necessary actions to achieve the vision, purposes, and goals of the Complex, as described in chapter 2, "The Refuge Complex." Wildlife is the first priority in the management of the Complex, and public use (wildlife-dependent recreation) is allowed and encouraged as long as it is compatible with the Complex's purposes.

This draft CCP and EA have been prepared by a planning team composed of representatives from various Service programs, including national wildlife refuges; South Dakota Game, Fish and Parks (SDGFP); and the Yankton Sioux Tribe. In addition, the planning team used public input. Public involvement and the planning process are described in section 1.5, "The Planning Process."

After reviewing management needs and a wide range of public comments, the planning team developed alternatives for management of the Complex; these are presented in chapter 3, "Alternatives." Resources of the Complex are described in chapter 4, "Affected Environment," and predicted effects of the alternatives are described in chapter 5, "Environmental Consequences." The planning team recommended one alternative to be the Service's proposed action. This action addresses all substantive issues while fulfilling the vision, purposes, and goals of the Complex, and it is the Service's recommended course of action for management of the Complex. The details of the proposed action compose the draft CCP, which is chapter 6.

1.1 Purpose and Need for the Plan

The purpose of this draft CCP and EA is to identify the role that the Complex will play in support of the mission of the National Wildlife Refuge System (Refuge System) and to provide long-term guidance for management of refuge programs and activities. The CCP is needed to:

- communicate with the public and other partners in efforts to carry out the mission of the Refuge System;
- provide a clear statement of direction for management of the refuge;

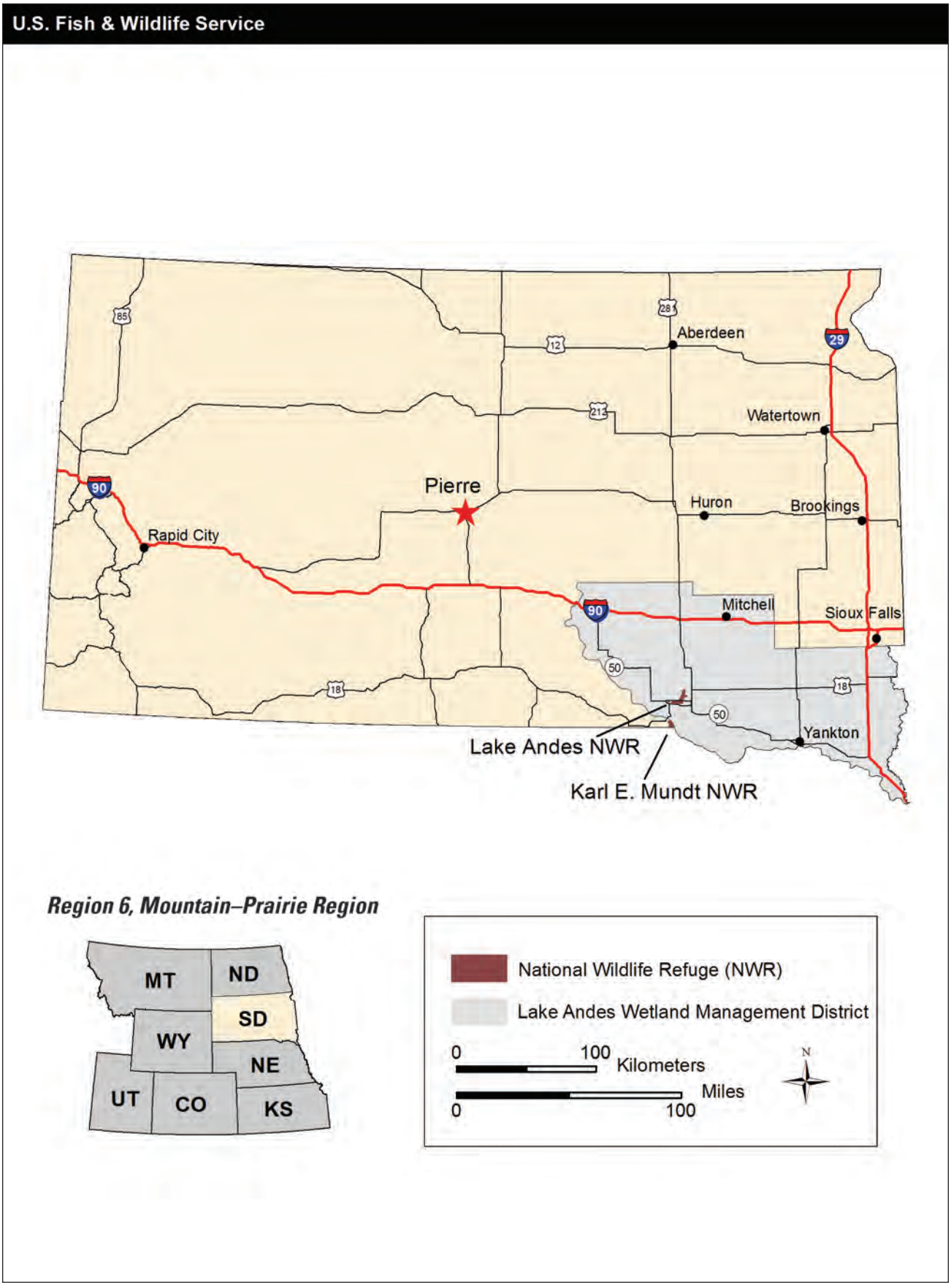


Figure 2. Location map of the Lake Andes National Wildlife Refuge, Karl E. Mundt National Wildlife Refuge, and Lake Andes Wetland Management District, South Dakota.

- provide neighbors, visitors, and government officials with an understanding of the Service's management actions on and around the refuge;
- ensure that the Service's management actions are consistent with the mandates of the Improvement Act;
- ensure that management of the refuge is consistent with Federal, State, and county plans;
- provide a basis for development of budget requests for the refuge's operation, maintenance, and capital improvement needs.

Sustaining the nation's fish and wildlife resources is a task that can be accomplished only through the combined efforts of governments, businesses, and private citizens.

1.2 North American Model of Wildlife Conservation

Wildlife conservation in North America evolved to take on a form unique in the world; in recent years, it has come to be known as the North American Model of Wildlife Conservation (Geist et al. 2001). The wildlife conservation movement arose out of the conflict between market hunters and sport hunters in the mid- to late-nineteenth century. Market hunting increased in response to the growth in urban population fueled by the Industrial Revolution. Between 1820 and 1860, the percentage of Americans living in cities increased from 5 percent to 20 percent; this fourfold increase is the greatest proportional increase in urban population that ever occurred in the United States (Reiss 1995). The demand for meat and hides—along with feathers for the millinery trade—led to exploitation of game animals by market hunters. Along with the increase in the urban population came a new breed of hunter—one who hunted for the chase and the challenge it provided. These sport hunters valued game animals more when they were alive; market hunters, however, placed value on dead animals they could bring to market. The growing legion of sport hunters started a national movement that resulted in Federal and State governments taking responsibility for regulating the take of wildlife.

The keystone concept of the North American Model of Wildlife Conservation, and the bedrock that allowed government to exercise control, is the public trust doctrine (Geist and Organ 2004). With origins in Greek and Roman law, the Magna Carta, and the 1842 *Martin v. Waddell* U.S. Supreme Court decision, the public trust doctrine as it applies to wildlife conservation is the principle that wildlife belongs to no one; it is held in trust for all by government.

The seven pillars of the North American Model of Wildlife Conservation follow:

- wildlife as a public trust resource
- elimination of markets for game
- allocation of wildlife by law
- wildlife only killed for a legitimate purpose
- wildlife considered an international resource
- science as the proper tool to discharge wildlife policy
- democracy of hunting

For more than 100 years, these pillars have stood the test of time despite significant changes in approaches to wildlife conservation. The original conservation movement championed by Theodore Roosevelt, George Bird Grinnell, and others emphasized stemming wildlife population declines through implementing programs that restricted take and protected lands. During the 1920s, conservationists realized that greater efforts were needed, and a committee including Aldo Leopold, A. Willis Robertson, and other leading conservationists of the time authored the 1930 American Game Policy. This policy called for a restoration program for habitats and populations based on scientific research and supported with stable, equitable funding. Within a decade, many needs of this program were fulfilled through landmark legislation, including the Duck Stamp Act, to fund land acquisition for national wildlife refuges. In addition, the Pittman–Robertson Wildlife Restoration Act shifted excise taxes imposed on firearms and ammunition to fund wildlife restoration through cooperation between the Service and State fish and wildlife agencies. To use this money, States were required to pass laws that prevented diversion of hunting license revenues to any purpose other than administration of the State fish and wildlife agency.

In recent decades, wildlife management has placed greater emphasis on overall wildlife diversity. All wildlife species have benefited from the North American Model of Wildlife Conservation pillars, not just game animals. The Refuge System has evolved along with the North American Model of Wildlife Conservation—it today provides refuge for virtually all species found in the United States and recreation for all Americans.

It is a realization of the North American Model of Wildlife Conservation to provide for science-based management of international wildlife resources held in trust for all. The importance of this system to American society can best be appreciated if we were to contemplate its loss. Wildlife connects us to the heritage of this country and our ancestors who built our society. It connects us as well to the natural world of which we are a part, but from which we have become so disconnected. To lose this connection is to lose the basis of our humanity.

1.3 The U.S. Fish and Wildlife Service and the Refuge System

The Service is the principal Federal agency responsible for fish, wildlife, and plant conservation. The Refuge System is one of the Service's major programs.

U.S. FISH AND WILDLIFE SERVICE

In the late 19th and early 20th centuries, America's fish and wildlife resources were declining at an alarming rate, largely due to unrestricted market hunting. Concerned citizens, scientists, and hunting and angling groups joined together and generated the political will for the first significant conservation measures taken by the Federal Government. These actions included the establishment of the Bureau of Fisheries in the 1870s and, in 1900, passage of the first Federal wildlife law—the Lacey Act—which prohibited interstate transportation of wildlife taken in violation of State laws. Beginning in 1903, President Theodore Roosevelt established more than 50 wildlife refuges across the Nation.

> *The mission of the U.S. Fish and Wildlife Service, working with others, is to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people.*

Over the next three decades, the United States ratified the Migratory Bird Treaty with Great Britain, and Congress passed laws to protect migratory birds, establish new refuges, and create a funding source for refuge land acquisition. In 1940, the U.S. Fish and Wildlife Service was created within the Department of the Interior, and existing Federal wildlife functions including law enforcement, fish management, animal damage control, and wildlife refuge management were combined into a single organization for the first time.

Today, the Service enforces Federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores vital wildlife habitat, protects and recovers endangered species, and helps other governments with conservation efforts. In addition, the Service administers a Federal aid program that distributes hundreds of millions of dollars to States for fish and wildlife restoration, boating access, hunter education, and related programs across the United States.

SERVICE ACTIVITIES IN SOUTH DAKOTA

Service activities in South Dakota contribute to the State's economy, ecosystems, and education programs. The following list describes the Service's presence and activities statewide in South Dakota each year:

- employs 173 people in South Dakota
- coordinates 191 volunteers donating more than 8,000 hours in the following areas:
  - more than 4,000 hours for wildlife and habitat
  - nearly 1,500 hours for maintenance work
  - 1,350 hours for wildlife-dependent recreation
  - 1,165 hours in miscellaneous other activities related to Service work
- manages two national fish hatcheries encompassing 591.79 acres
- manages one fish and wildlife management assistance office
- manages seven national wildlife refuges encompassing 103,884.85 acres
- manages six wetland management districts across 50 South Dakota counties; these districts comprise the following:
  - 160,432.41 fee acres (waterfowl production areas)
  - 591,308.44 wetland easement acres
  - 705,532.59 grassland easement acres
  - 712.23 flowage and miscellaneous easement acres
  - 40,875.90 Farmers Home Administration easements
- hosts more than 202,000 annual visitors to Service-managed lands:
  - more than 93,000 hunting visits and an unknown number of trapping visits
  - nearly 45,000 fishing visits
  - more than 57,500 wildlife observation visits
  - environmental education programs for nearly 7,000 students
- provides $4,668,784 to SDGFP for sport fish restoration and $8,793,314 for wildlife restoration and hunter education
- employs eight Partners for Fish and Wildlife program managers who have helped private landowners restore wetland and upland habitats as shown below:
  - 195 wetlands restored (654 acres)
  - 136 wetlands established (589 acres)

- 53 upland sites (grazing systems) enhanced (26,300 acres)
- 31 grassland restorations (1,798 acres)

- makes payments to counties through the Refuge Revenue Sharing Act (Public Law [P.L.] 95–469, amended 1978); payments for fee title lands are based on the greatest of three-quarters of 1 percent of the fair market value (appraisals are completed every 5 years), 25 percent of net receipts, or $0.75 per acre

National Wildlife Refuge System

In 1903, President Theodore Roosevelt designated the 5.5-acre Pelican Island in Florida as the Nation's first wildlife refuge for the protection of native nesting birds. This was the first time the Federal Government set aside land for wildlife. This small but significant designation was the beginning of the National Wildlife Refuge System.

One hundred years later, the Refuge System has become the largest collection of lands in the world specifically managed for wildlife, encompassing more than 150 million acres within 553 refuges and more than 3,000 waterfowl production areas providing breeding and nesting habitat for migratory birds. Today, there is at least one refuge in every State as well as in Puerto Rico and the U.S. Virgin Islands.

The Improvement Act of 1997 established a clear mission for the Refuge System.

> *The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.*

The Improvement Act states that each national wildlife refuge (that is, each unit of the Refuge System, which also includes wetland management districts) shall be managed to:

- fulfill the mission of the Refuge System;
- fulfill the individual purposes of each refuge and district;
- consider the needs of fish and wildlife first;
- fulfill the requirement of developing a CCP for each unit of the Refuge System, and fully involve the public in the preparation of these plans;
- maintain the biological integrity, diversity, and environmental health of the Refuge System;
- recognize that wildlife-dependent recreation activities including hunting, fishing, wildlife observation, wildlife photography, and environmental education and interpretation, are legitimate and priority public uses;
- retain the authority of refuge managers to determine compatible public uses.

In addition to the mission for the Refuge System, the wildlife and habitat vision for each unit of the Refuge System stresses the following principles:

- Wildlife comes first.
- Ecosystems, biodiversity, and wilderness are vital concepts in refuge and district management.
- Habitats must be healthy.
- Growth of refuges and districts must be strategic.
- The Refuge System serves as a model for habitat management with broad participation from others.

Following passage of the Improvement Act, the Service immediately began to carry out the direction of the new legislation, including preparation of CCPs for all national wildlife refuges and wetland management districts. Each refuge and district is required to complete its CCP within the 15-year schedule (by 2012). As directed by the Improvement Act, the Service involves the public in preparing all CCPs.

People and the Refuge System

The Nation's fish and wildlife heritage contributes to the quality of American lives and is an integral part of the country's greatness. Wildlife and wild places have always given people special opportunities to have fun, relax, and appreciate the natural world.

Whether through bird watching, fishing, hunting, photography, or other wildlife pursuits, wildlife recreation contributes billions of dollars to local economies. In particular, money generated from the taxing of sporting arms and ammunition and of fishing equipment that is authorized by the Pittman–Robertson and Dingell–Johnson Acts, respectively, has generated tens of billions of dollars. Distributed by the Service, this money has been used by States to increase wildlife and fish populations, expand habitat, and train hunters across the Nation. Approximately 35 million people visited the Refuge System in 2006, mostly to observe fish and wildlife in their natural habitats (Carver and Caudill 2007). Visitors are most often accommodated through nature trails, auto tours, interpretive programs, and hunting and fishing opportunities. Local communities that surround the refuges and wetland management districts derive significant economic benefits. Economists report that Refuge System visitors contribute more than $1.7 billion annually to local economies (Carver and Caudhill 2007).

1.4 National and Regional Mandates

National wildlife refuges and wetland management districts are managed to achieve the mission and goals of the Refuge System, along with the designated purpose of the refuge or district (as described in establishing legislation, Executive orders, or other establishing documents). Key concepts and guidance of the Refuge System are in the Refuge System Administration Act of 1966 (Administration Act), Title 50 of the Code of Federal Regulations (CFR), "The Fish and Wildlife Service Manual," and the Improvement Act.

The Improvement Act amends the Administration Act by providing a unifying mission for the System, a new process for determining compatible public uses on refuges and districts, and a requirement that each unit of the Refuge System be managed under a CCP. The Improvement Act states that wildlife conservation is the priority of Refuge System lands and that the Secretary of the Interior will ensure that the biological integrity, diversity, and environmental health of refuge lands are maintained. Each refuge or district must be managed to fulfill the Refuge System's mission and the specific purposes for which it was established. The Improvement Act requires the Service to monitor the status and trends of fish, wildlife, and plants in each unit of the Refuge System.

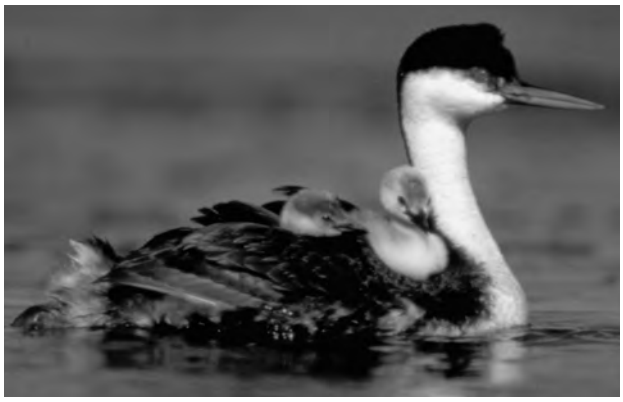
Detailed descriptions of these and other laws and Executive orders that may affect the CCP or the Service's implementation of the CCP are in appendix A. Service policies on planning and day-to-day management of a refuge are in the "Refuge System Manual" and "The Fish and Wildlife Service Manual." Region 6 Service guidance on complying with the Migratory Bird Treaty Act (appendix B) will be followed.

1.5 Refuge Contributions to National and Regional Plans

The Lake Andes National Wildlife Refuge Complex contributes to the conservation efforts described below.

Fulfilling the Promise

A 1999 report, "Fulfilling the Promise, The National Wildlife Refuge System" (USFWS 1999), is the culmination of a yearlong process by teams of Service employees to evaluate the Refuge System nationwide. This report was the focus of the first national Refuge System conference (in 1998), which was attended by refuge managers, other Service employees, and representatives from leading conservation organizations.



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The report contains 42 recommendations packaged with three vision statements dealing with wildlife and habitat, people, and leadership. This CCP deals with all three of these major topics, and the planning team looked to the recommendations in the report for guidance during CCP planning.

Bird Conservation

During the past few decades, there has been growing interest in conserving birds and their habitats. This trend has led to the development of partnership-based bird conservation initiatives that have produced international, national, and regional conservation plans. "All-bird" conservation planning in North America is being achieved through the North American Bird Conservation Initiative (NABCI). Formed in 1999, the NABCI committee is a coalition of government agencies, private organizations, and bird initiatives in the United States working to advance integrated bird conservation based on sound science and cost-effective management to benefit all birds in all habitats. Conservation of all birds is being accomplished under four planning initiatives: the "U.S. Shorebird Conservation Plan," the "North American Landbird Conservation Plan" (Partners in Flight), the "North American Waterbird Conservation Plan," and the "North American Waterfowl Management Plan."

U.S. Shorebird Conservation Plan

Partners from State and Federal agencies and nongovernmental organizations from across the country pooled their resources and expertise to develop a conservation strategy for migratory shorebirds and the habitats upon which they depend. The resulting plan, the "U.S. Shorebird Conservation Plan," provides a scientific framework to determine species, sites, and habitats that most urgently need conservation action. The main goals of the plan, completed in 2000, are to ensure that adequate quantities and qualities of shorebird habitat are maintained at local levels and to maintain or restore shorebird populations at the continental and hemispheric levels. Separate technical reports were developed that focused on a

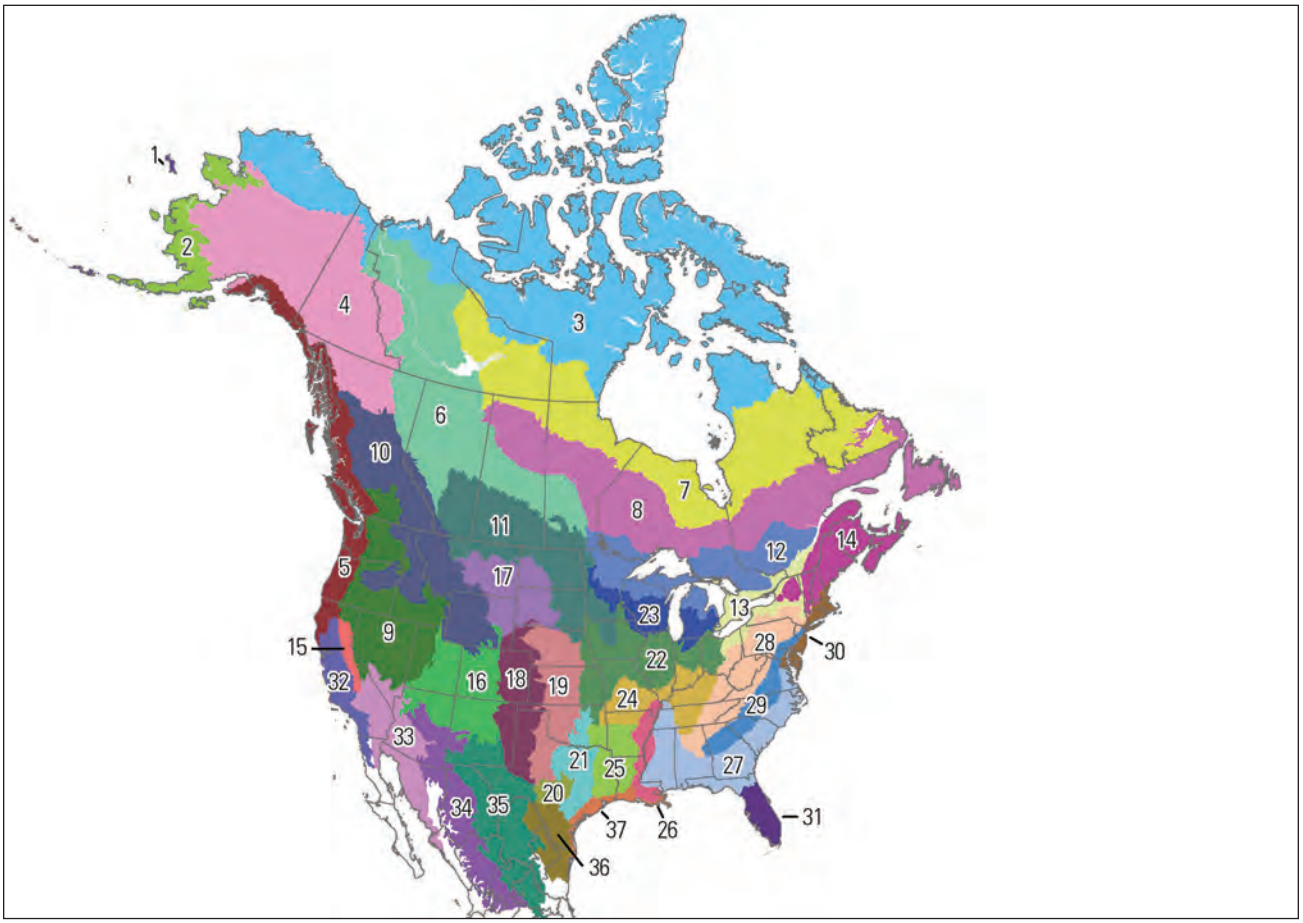

Figure 3. Map of the bird conservation regions of North America.

conservation assessment, comprehensive monitoring strategy, research needs, and education and outreach. These national assessments were used to step down goals and objectives into 11 regional conservation plans. Although some outreach, education, research, monitoring, and habitat conservation programs are being implemented, accomplishment of conservation objectives for all shorebird species will require a coordinated effort among traditional and new partners.

North American Landbird Conservation Plan (Partners in Flight)

The "North American Landbird Conservation Plan," developed through the Partners in Flight program, began in 1990 with the recognition of declining population levels of many migratory bird species. The challenge, according to the program, is managing human population growth while maintaining functional natural ecosystems. To meet this challenge, Partners in Flight worked to identify priority landbird species and habitat types. Partners in Flight activity has resulted in 52 bird conservation plans covering the continental United States.

The primary goal of Partners in Flight is to provide for the long-term health of landbird life on this continent. The first priority is to prevent the rarest species from going extinct. The second priority is to prevent uncommon species from descending into threatened status. The third priority is to "keep common birds common."

For planning purposes, Partners in Flight splits North America into seven groups of birds by ecological area—avifaunal biomes—and 37 bird conservation regions (BCRs) (figure 3). The Lake Andes National Wildlife Refuge Complex is within the prairie avifaunal biome in BCR 11, the Prairie Pothole Region.

BCR 11 is the most important waterfowl production area in the North America, despite extensive wetland drainage and tillage of native grasslands. The density of breeding dabbling ducks commonly exceeds 100 pairs per square mile in some areas during years with favorable wetland conditions. The area constitutes the core of the breeding range of most dabbling duck and several diving duck species. BCR 11 provides critical breeding and migration habitat for more than 200 other bird species, including such species of concern as Franklin's gull and yellow rail, as well as piping plover, federally listed as threatened. In addition, Baird's sparrow, Sprague's pipit, chestnut-collared longspur, Wilson's phalarope, marbled godwit, and American avocet are among the many priority nonwaterfowl species that breed in BCR 11. According to NABCI,

wetland areas also provide key spring migration sites for Hudsonian godwit, American golden-plover, white-rumped sandpiper, and buff-breasted sandpiper.

Partners in Flight conservation priorities in the prairie avifaunal biome focus on protection of remaining prairies; management of existing grasslands using fire and grazing; and control of invasive plants, including woody plant encroachment.

North American Waterbird Conservation Plan

The "North American Waterbird Conservation Plan" provides a contiguous framework for conserving and managing colonial-nesting waterbirds including 209 species of seabirds, coastal waterbirds (gulls, terns, and pelicans), wading birds (herons and ibises), and marshbirds (certain grebes and bitterns). The overall goal of this conservation plan is to make sure that the following are sustained or restored throughout the waterbirds' ranges in North America: (1) the distribution, diversity, and abundance of waterbird populations; (2) waterbird habitats (breeding, migratory, and nonbreeding); and (3) important sites for waterbirds. The geographic scope of the plan covers 28 countries from Canada to Panama as well as islands and nearshore areas of the Atlantic and Pacific Oceans, the Gulf of Mexico, and the Caribbean Sea. This waterbird partnership consists of Federal, State, and Provincial wildlife agencies; individuals; and nonprofit conservation organizations.

Waterbird planning regions were identified to allow for planning at a practical, landscape-level scale. Planning region boundaries are based on a combination of political considerations and ecological factors. Sixteen planning regions were identified within North and South Americas. Lake Andes National Wildlife Refuge Complex is located within the Northern Prairie and Parkland Conservation Region. The Northern Prairie and Parkland Region is an area composed primarily of mixed-grass prairie. The region offers waterbirds a tremendous variety and often a high density of small wetlands or "potholes," which range from wet meadows to saline lakes, marshes, and fens. Widely regarded as the most important waterfowl production area in North America, the region boasts 24 colonial and 15 noncolonial species of waterbirds including the endangered least tern. Several species reach their highest densities or have breeding ranges contained largely within the region, notably the American white pelican, eared grebe, California gull, black tern, Forster's tern, and Franklin's gull.

North American Waterfowl Management Plan

The "North American Waterfowl Management Plan" (NAWMP) was originally written in 1986. The plan envisioned a 15-year effort to achieve landscape conditions that could sustain waterfowl populations. Specific NAWMP objectives are to increase and restore duck populations to the average levels of the 1970s—62 million breeding ducks and a fall flight of 100 million birds.

By 1985, waterfowl populations had plummeted to record lows. Habitat on which waterfowl depend was disappearing at a rate of 60 acres per hour. Recognizing the importance of waterfowl and wetlands to North Americans and the need for international cooperation to help in the recovery of a shared resource, the governments of the United States and Canada developed a strategy to restore waterfowl populations through habitat protection, restoration, and enhancement. Mexico became a signatory to the plan in 1994.

The plan is innovative because of its international scope and its implementation at the regional level. Its success depends on the strength of partnerships called joint ventures, which involve Federal, State, Provincial, tribal, and local governments; businesses; conservation organizations; and individual citizens.

Joint ventures are regional, self-directed partnerships that carry out science-based conservation through a wide array of community participation. Joint ventures develop implementation plans focusing on areas of concern identified in the plan. The Lake Andes National Wildlife Refuge Complex lies within the Prairie Pothole Joint Venture.

Recovery Plans for Federally Listed Threatened or Endangered Species

Where federally listed threatened or endangered species occur on the Complex, management goals and strategies in their respective recovery plans will be followed. The list of threatened or endangered species that occur on the Complex will change as species are listed or delisted, or as listed species are discovered on Complex lands.

At the time of plan approval, the Complex is following the draft recovery plan for:

- Piping plover (threatened) in the northern Great Plains (USFWS 1994a);
- Whooping crane (endangered) (USFWS 1994b);
- Interior least tern (endangered) (USFWS 1990);
- Western prairie fringed orchid (threatened) (USFWS 1996).

State Comprehensive Conservation Wildlife Strategy

Over the past several decades, documented declines of wildlife populations have occurred nationwide. Congress created the State Wildlife Grant (SWG) program in 2001. This program provides States with Federal dollars to support conservation aimed at preventing wildlife from becoming endangered and in need of protection under the Endangered Species Act. The SWG program represents an ambitious endeavor to take an active hand in keeping species from becoming threatened or endangered in the future. According to

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the SWG program, each State and territory as well as the District of Columbia must complete a comprehensive wildlife conservation strategy (CWCS) by October 1, 2005, to receive future funding.

The strategies promulgated under the SWG program will help define an integrated approach to the stewardship of all wildlife species, with additional emphasis on species of concern and habitats at risk. The goal is to shift focus from single-species management and highly specialized individual efforts to a geographically based, landscape-oriented fish and wildlife conservation effort. The Service approves CWCSs and administers SWG program funding.

The CWCS for the State of South Dakota was reviewed and information was used during development of this draft CCP. Implementation of CCP habitat goals and objectives will support the goals and objectives of the CWCS.

The CWCS is South Dakota is guided by SDGFP's mission: "to perpetuate, conserve, manage, protect, and enhance South Dakota's wildlife resources, parks, and outdoor recreational opportunities." This statement sets the framework for the State's actions.

SDGFP has opted to apply a coarse filter/fine filter strategy to its public land management needs. The CWCS emphasizes ecosystem diversity as the primary means to address habitat needs for biodiversity, with a secondary focus on nonhabitat concerns regarding species of greatest conservation need. Program staff establishes a schedule for the development of recovery objectives for State-listed species. A threats assessment, identification of recovery goals, and species recovery actions provide a coordinated approach and give guidance for cooperating agencies to assist in recovery of these species. Management actions directed toward species are designed using an adaptive management framework.

South Dakota's list of "Species of Greatest Conservation Need" includes 28 birds, 10 mammals, 7 freshwater mussels, 4 gastropods, 9 insects, 20 fishes, and 12 reptiles and amphibians. There are three primary criteria for inclusion in the list: State- and federally listed species for which the State has a mandate for recovery, species for which South Dakota represents a significant portion of the species' overall range, and species that are indicative of or depend upon a declining or unique habitat in South Dakota.

1.6 Strategic Habitat Conservation

A BROADER VISION

In the face of escalating challenges such as land use conversion, invasive species, water scarcity, and complex issues that have been amplified by accelerating climate change, the Service has evolved from its ecosystem approach to conservation toward developing a broader vision.

A cooperative effort by the Service and the U.S. Geological Survey (USGS) culminated in a report by the National Ecological Assessment Team (USGS 2006). The report outlines a unifying adaptive resource management approach for conservation at a landscape scale—the entire range of a priority species or suite of species. This is strategic habitat conservation—a way of thinking and doing business by incorporating biological goals for priority species populations, making strategic decisions about the work needed, and constantly reassessing.

Since 2006, the Service has taken significant steps to turn this vision into reality and has defined a framework of 22 geographic areas. Experts from the Service and USGS developed this framework through an aggregation of bird conservation regions (figure 3). The Complex lies in the Plains and Prairie Potholes Region (figure 1). Key species and species groups targeted in this geographic area are paddlefish, pallid sturgeon, waterfowl, shorebirds, grassland birds, and black-footed ferret.

The Service is using this framework of geographic areas as the basis to locate the first generation of landscape conservation cooperatives. These cooperatives are conservation–science partnerships between the Service and other Federal agencies, States, tribes, nongovernmental organizations, universities, and other entities. Designed as fundamental units for planning and science, the cooperatives have the capacity to help the Service carry out the elements of strategic habitat conservation—biological planning, conservation design and delivery, and monitoring and research. Coordinated planning and scientific information will strengthen the Service's strategic response to accelerating climate change, land use conversion, invasive species, water scarcity, and a host of other challenges.

Climate Change

The Service believes that any rapid acceleration in climate change could affect the Nation's fish, wildlife, and plant resources in profound ways. While many species would continue to thrive, some may decline and in some instances go extinct. Others would survive in the wild only through direct and continuous intervention by managers. In 2010, the Service drafted a strategic plan to address climate change for the next 50 years entitled "Rising to the Challenge—Strategic Plan for Responding to Accelerating Climate Change" (USFWS 2010). The strategic plan employs three key strategies: adaptation, mitigation, and engagement. In addition, the plan acknowledges that no single organization or agency can address climate change without allying itself with others across the Nation and around the world (USFWS 2010). This draft plan is an integral part of the Department of the Interior's strategy for addressing climate change as expressed in Secretarial Order 3289 (September 14, 2009).

The Service will use the following guiding principles from the draft strategic plan (USFWS 2010) in responding to climate change:

- priorities setting—continually evaluate priorities and approaches, make difficult choices, take calculated risks, and adapt to climate change
- partnership—commit to a new spirit of coordination, collaboration, and interdependence with others
- best science—reflect scientific excellence, professionalism, and integrity in all the Service's work
- landscape conservation—emphasize the conservation of habitats within sustainable landscapes, applying the Service's strategic habitat conservation framework
- technical capacity—assemble and use state-of-the-art technical capacity to meet the climate change challenge
- global approach—be a leader in national and international efforts to meet the climate change challenge

1.7 Planning Process

The Service prepared this draft CCP and EA in compliance with the Improvement Act, Part 602 of "The Fish and Wildlife Service Manual," NEPA, and the Council on Environmental Quality regulations that implement NEPA. Additional requirements and guidance are contained in the Refuge System's planning policy, issued in 2000. This policy established requirements and guidance for refuge and district plans—including CCPs and stepdown management plans—to make sure that planning efforts follow the Improvement Act. The planning policy identified several steps of the CCP and environmental analysis process (figure 4).

Figure 4. Steps in the planning process.

The planning team consists of Service personnel from national wildlife refuges, SDGFP, and the Yankton Sioux Tribe (see appendix C). During pre-planning, the team developed a mailing list, identified planning issues, drafted a list of special qualities that characterized the Complex, and drafted vision statements and goals that will guide the management of the Complex over the next 15 years. The planning team identified current status of each Complex program and compiled and analyzed relevant data. Table 1 summarizes the planning process to date for this draft CCP and EA.

Public involvement

Scoping is the process of obtaining information from the public for input into the planning process. Public involvement, which is required by NEPA, helps ensure that substantive public comments (those that are within the authority and management capabilities of the Service) are addressed in the final CCP.

During preplanning, a mailing list was prepared that included private citizens; local, regional, and State government representatives and legislators; other Federal agencies; and interested organizations (see appendix D). On November 27, 2006, a planning update was sent to recipients on the mailing list; this update included information on the history of the Complex, an overview of the CCP process, and a comment form and postage-paid envelope to give the public an opportunity to provide written comments. The planning update also included an invitation to attend public scoping meetings.

The three public scoping meetings, which were also announced by local media, were held in November 2006. At each meeting, a presentation was given about the Complex, the CCP and EA, and the NEPA process. Attendees were encouraged to ask questions and offer comments during the meeting, and each attendee was given a comment form to submit additional thoughts or questions in writing. The 23 attendees included local citizens and members of the White Lake Sportsmen's Club and Pheasants Forever.

A notice of intent to prepare the draft CCP and EA was published in the Federal Register on May 2007.

Comments were received throughout the public scoping process. Input obtained from meetings and correspondence, including emails, was considered in development of this draft CCP and EA.

State coordination

The SDGFP is responsible for managing natural resource lands owned by the State, in addition to enforcement responsibilities for the State's migratory birds and endangered species.

On August 25, 2006, an invitation letter to participate in the CCP process was sent by the Service's Region 6 Director to the SDGFP director, and two representatives from SDGFP were assigned to the planning team. Local SDGFP wildlife managers and the staff of the Complex maintain excellent and ongoing working relations that predate the start of the CCP process.

Tribal coordination

On August 25, 2006, the Service's Region 6 Director sent letters to six Native American tribal governments with aboriginal interests in the planning area: Omaha Tribal Council, Ponca Tribe of Nebraska, Santee Sioux, Winnebago Tribal Council, Yankton Sioux, and Otoe-Missouria Tribe. Each letter included information about the CCP and invited tribal recipients to serve on the planning team. In turn the Service received one inquiry and, after receiving clarification on the CCP process, the Yankton Sioux tribal government designated a tribal member as the representative for its nation in the planning process. This member participated in the initial planning meetings and site visits but later left the tribal government and stopped participating in the planning process. The Yankton Sioux tribal government was unable to find a replacement.

Results of scoping

Table 1 summarizes all scoping activities. Public input collected from scoping meetings and correspondence, including comment forms and emails, was used in the development of a final list of Complex issues to be addressed in this draft CCP and EA.

The Service determined which alternatives could best address these issues. The planning process ensures that issues with the greatest effect on the Complex are resolved or given priority over the life of the final CCP. Identified issues, along with a discussion of effects on resources, are summarized in chapter 2.

In addition, the Service considered suggested changes to current Complex management presented by the public and other groups.

Decision to be made

The Service's Director of Region 6 will make the final decision on the selection of a preferred alternative for the CCP. The Regional Director's decision will be based on the legal responsibility of the Service and will consider the mission of the Service and the System, other legal and policy mandates, the purposes of the Refuge Complex, the visions and goals identified in this draft CCP, and public input received. Other considerations will be land uses in the surrounding area and other parts of the ecosystem, the environmental effects of the alternatives, and budget projections.

The Service's final decision will be documented in a finding of no significant impact that is published together with the final CCP and distributed to the public. The Service will begin to carry out the final CCP immediately upon publication of the notice of availability of the final CCP in the Federal Register.

Table 1. Planning process summary for the Lake Andes National Wildlife Refuge Complex, South Dakota.

Date	*Event*	*Outcome*
September 2006	Initial meeting with the proposed planning team	Developed the CCP overview; finalized the planning team; developed an initial list of Complex issues and qualities; initiated the development of the CCP mailing list
October 23–25, 2006	Kickoff meeting	Updated the Complex issues and qualities list; identified biological and mapping needs; planned public scoping process
November 27, 2006	Mailing of the first planning update	Mailed a planning update (a short document describing the CCP process), comment form, and a postage-paid envelope to each recipient on the mailing list
November 2006	Public scoping planning	Finalized the scoping meeting schedules and formats
November 28, 2006	Public meeting—Plankinton, South Dakota	Offered the public an opportunity to learn about the CCP and to provide comments
November 29, 2006	Public meeting—Parker, South Dakota	Offered the public an opportunity to learn about the CCP and to provide comments
November 30, 2006	Public Meeting—Lake Andes, South Dakota	Offered the public an opportunity to learn about the CCP and to provide comments
February 21–22, 2007	Purpose, vision, and goals workshop	Identified the purposes and developed the draft visions and goals for the Complex
May 16–17, 2007	Alternatives workshop	Drafted a comprehensive range of alternatives for management of the Complex
October 2008	Environmental consequences and election of the proposed action workshop	Assessed the environmental consequences of implementing each alternative and selected the proposed action (preferred alternative)
September 2011	Objectives and strategies workshop	Drafted the objectives, strategies, and rationales for the proposed action
December 2011	Draft CCP and EA preparation	Prepared sections of the preliminary draft CCP and EA
April 2012	Review of the draft CCP and EA	Reviewed the first draft of the CCP and EA and provided comments
April–May 2012	Internal Service review of the draft CCP and EA	Staff from the Service's regional office and others reviewed the draft CCP and EA and provided comments
May–October 2012	Preparation of public draft CCP and EA	Reviewed internal comments and updated the draft CCP and EA
October 2012	Preparation and distribution of second planning update	Prepared and mailed second of two planning updates for the CCP and EA
October–November 2012	Public review of draft CCP and EA	Released public draft of CCP and EA
November 2012	Planning team review of public comments	Will compile and consider public comments and recommend changes to the CCP
November 2012	Briefing of the Service's Regional Director	Service's Regional Director and deputy regional director will review and address a summary of public comments
November 2012	Briefing of the Service's National Director	Will make necessary changes to the final CCP; the Service's National Director will be briefed on public comments and the Service's responses
December 2012	CCP approval	Service's Regional Director will determine whether to approve final CCP
December 2012–January 2013	CCP and summary trifold printing and distribution	Will finalize, print, and distribute final CCP and planning summary trifold